DESMARAIS ENVIRONMENTAL, INC.
62 Al Wood Drive Barrington, NH 03825
(603) 664-5500

PCB-Containing Caulk
Window & Door Replacement
Cleanup and Risk-Based Disposal Plan

University of New Hampshire
Stillings Dining Hall
20 Ballard Street
Durham, New Hampshire

March 29, 2011

March 27, 2011

Ms. Kimberly Tisa
United States Environmental Protection Agency, Region 1
One Congress Street, Suite 1100
Boston, Massachusetts 02114-2023

RE: Clean-up and Risk-Based Disposal Plan – Window and Door Replacement
Polychlorinated Biphenyl (PCB) Containing Caulking
University of New Hampshire - Stillings Dining Hall

Dear Ms. Tisa,

On behalf of the University of New Hampshire (UNH), Desmarais Environmental, Inc. has prepared this Clean-up and Risk-Based Disposal Plan for your approval summarizing proposed actions to address polychlorinated biphenyl PCB-containing window and door caulking at the University of New Hampshire Stillings Dining Hall. This plan was developed based on the results of bulk, surface wipe, soil, air and masonry sampling completed by Desmarais Environmental, Inc. in 2010 and 2011. This plan is being submitted to EPA for approval under CFR 761.61(c).

Background
Stillings Dining Hall is a dining facility owned by UNH which is located at 20 Ballard Street on the main campus in Durham, New Hampshire. The building was constructed in 1963 with brick and mortar exterior and a mix of pre-cast concrete and CMU block interior walls. UNH plans to replace 61 windows and 13 doors on all four elevations. Due to the potential presence of PCB-containing caulk, UNH enlisted the services of Desmarais Environmental to determine if any of the caulks that would be disturbed as part of this project contained PCBs. Desmarais Environmental collected bulk samples of each suspect caulking material.

Occupancy & Notification
The building is occupied by approximately 50 university employees with varying student populations during dining. Building occupants will be informed of the project and related PCB remediation work via postings at all building entrances and e-mail distribution. A copy of the posting is included in Appendix 4.

Sampling and Testing Methodologies

Bulk sampling for PCBs
Bulk samples of suspect PCB-containing caulk were taken utilizing nitrile gloves and disposable razor knife solvent decontaminated between sample collections. Once a representative sample of the caulk was removed it was sealed in foil wrap and placed in a glass scintillation vial for shipment to the laboratory. Bulk samples were analyzed at the laboratories utilizing EPA Method 8082 using soxhlet extraction.

Wipe sampling for PCBs
Wipe samples were collected utilizing protocols outlined in the EPA spill clean-up policy. A two-inch by two-inch cotton pad moistened completely with hexane was used to wipe in two directions using a 100 centimeter template. Once collected, the cotton pad was allowed to dry. When dry, the pad was placed in a scintillation vial and analyzed by EPA Method 8082 using soxhlet extraction.

Masonry sampling for PCBs
Samples of suspect PCB-containing masonry were collected following procedures outlined in the "Standard Operating Procedure for Sampling Concrete in the Field." Once a representative sample of the masonry was removed it was sealed in a glass scintillation vial for shipment to the laboratory. Bulk samples were analyzed at the laboratories utilizing EPA Method 8082 using soxhlet extraction.

Soil sampling for PCBs
Samples of suspect PCB-containing soil were collected using a metal hand spade at the drip line surface, at a 6inch depth at the drip line, and at a distance of 2 feet from selected doors or windows. Samples of each type were combined as a composite by building elevation. Once a representative sample of the soil was removed it was sealed in a foil pouch for shipment to the laboratory. Soil samples were analyzed at the laboratories utilizing EPA Method 8082 using Soxhlet extraction.

Air sampling for PCBs
Air samples were collected using a low volume pump and puff glass sampling tube at a sampling rate of 3.5 liters per minute for 8 hours. The samples were analyzed by EPA Method TO-10A/680.

PCB Exposure Assessment

The initial assessment consisted of bulk sampling to determine if any of the caulking associated with the windows and doors scheduled for replacement at Stillings Dining Hall contain PCBs. On December 13, 2010 Desmarais Environmental collected three bulk samples of window and door perimeter caulking. Two types of caulking were observed with the majority being grey in color and assumed to be the original caulking used. The grey caulk is present at both interior and exterior door and window masonry junctures. A white caulk was also observed and sampled and appears to be a replacement applied over the original grey exterior caulking. All 3 caulking samples were found to contain PCBs above 50 PPM. Aroclor 1254 was identified in all three caulk samples at 210,000, 99,000 and 160,000 PPM. The caulking is in good condition with minor cracks in a few locations.

A variety of surfaces are in contact with the caulking. The exterior is a combination of brick and mortar or pre-cast masonry. The interior is either pre-cast or CMU block wall construction. A steel lintel is present at the top of the doors and windows on the first floor. This application is being made under 761.61(c) as it would be impossible to remove the contaminated pre-cast or CMU as they are structural components of the building and removal could compromise the integrity of the building structure.

Based on PCB sampling results and the need to replace the windows and doors, a full characterization of the PCBs was initiated which consisted of bulk sampling masonry, drip line soil, interior wipes and air sampling. Sampling took place on January 24, 31 and March 18, 2011. Following the initial soil sampling on January 31, which detected PCB in soil, additional sampling could not be accomplished until March 18, 2011 due to snow cover and frozen ground.

Wipe samples were collected from a window sill and floor at the base of a window wall. The sill and floor surfaces were non-porous. Neither wipe samples detected PCBs.

Three air samples were collected within the building at random locations and resulted in no airborne PCBs detected.

A variety of masonry samples were collected in order to characterize the extent of contamination in each masonry type. Samples were collected directly beneath the caulk at brick and mortar construction at one half inch intervals down to one inch. The first half inch of brick contained 8,200 PPM and the level from one half inch to one inch contained 1,200 PPM. Similar samples were also collected under the caulk at the window/CMU interior juncture and those results were 3,500 PPM in the first half inch and 210 PPM from one half to one inch in depth.

Not necessarily anomalous

Masonry samples were also collected at a distance of one inch from the caulk on brick and mortar, CMU, and pre-cast construction surfaces. Precast samples one inch from caulk did not detect PCBs. Brick and mortar samples one inch from the caulk resulted in 3,200 PPM. CMU samples one inch from the caulk in 76 and 92 PPM. The 3,200 PPM on the brick and mortar appeared to be an anomaly when compared with other results such as the CMU which should be the worst case base on the porosity of that masonry. Repeat sampling was conducted to confirm those results. The repeat sampling of brick and mortar resulted in two samples detecting no PCB at one inch from the caulk.

Sample other side window

Soil samples were initially collected at door and window drip lines as composite samples by elevation. Those results indicated that a small quantity of PCB is present in the soil at the drip lines of the doors and windows. PCB results were 4.3 PPM at the North elevation; 1.3 PPM at the West elevation; 2.5 PPM at the East elevation and 1.5 PPM at the South elevation. Additional sampling was conducted to determine the bounds of contamination. Composite samples were collected at a 6-inch depth at each elevation and

at locations two feet away from the drip line. Of the additional samples collected, only one from the North elevation, two feet from the drip line, detected PCBs at a concentration of 0.48 PPM.

In addition to the soil, a variety of miscellaneous surfaces were also tested at the drip line of the building. Those surfaces included concrete and asphalt walks and drainage stones surrounding HVAC compressors. None of these samples detected PCBs.

Results

Caulk Sampling 12/13/11

Sample #	Description	Location	Result PPM
87339	Grey original caulk exterior	NW corner window	210,000
87340	White caulk exterior	NW Corner Window	99,000
87341	Grey interior caulk	North window wall	160,000

Initial Soil Sampling 1/31/11

Sample #	Description	Location	Result PPM
99549	Composite North elevation	Drip line	4.3
99550	Composite West elevation	Drip line	1.3
99551	Composite East elevation	Drip line	2.5
99552	Composite South elevation	Drip line	1.5

Wipe Sampling 1/31/11

Sample #	Description	Location	Result PPM
99553	North stairwell floor	North stair landing	ND
99554	Window sill	Room G33	ND

Masonry Sampling 1/31/11

Sample #	Description	Location	Result PPM
99555	Brick under exterior caulk 0-0.5"	NW corner window	8,200
99556	Brick under exterior caulk 0.5-1.0"	NW Corner window	1,200
99557	Masonry under int caulk CMU 0-0.5"	North stairwell	3,500
99558	Masonry under int caulk CMU 0.5-1.0"	North stairwell	210
99559	Pre-Cast 1" from Caulk	East window wall	ND
99560	Brick 1" away from caulk	Window room G33	3,200
99561	CMU 1" away from interior caulk	North stairwell	76
99562	CMU 1" away from interior caulk	North stairwell	92

Air Sampling 1/24/11

Sample #	Description	Location	Result PPM
1	Air sampling	G33	ND
2	Air sampling	Paper room	ND
3	Air sampling	West stairway	ND
4	Air sampling	Blank	ND

Additional Soil & Misc. Sampling 3/18/11

Sample #	Description	Location	Result PPM
12285	Composite drip line at 6" depth	South elevation	ND
12286	Composite 2' from building	South elevation	ND
12287	Concrete walk at drip	South elevation	ND
12288	Composite drip line at 6" depth	East elevation	ND
12289	Composite 2' from building	East elevation	ND
12290	Concrete walk at drip	East elevation	ND
12291	HVAC drainage stones	East elevation	ND
12292	Composite drip line at 6" depth	North elevation	ND
12293	Composite 2' from building	North elevation	0.48
12294	Composite drip line at 6" depth	West elevation	ND
12295	Composite 2' from building	West elevation	ND
12296	Asphalt walk at drip	West elevation	ND

Additional Masonry Sampling 3/18/11

Sample #	Description	Location	Result PPM
12297	Brick & mortar 1" away from caulk	North window wall	ND
12298	Brick & mortar 1" away from caulk	West center door	ND

for us? ?

***Should we depict the actual soil sample locations on a print and include the limits of contamination. If Kim wanted the locations of each core from Parsons, and a condition of approval that we provide her with the same for the other wings, I would guess she will want a print depicting exterior location.

On another note regarding soil sampling, do you have any thoughts regarding soil sampling as part of long term management. You know air sampling will be part of it.

Proposed Cleanup and Risk-Based Disposal Plan

The objective of the proposed work is to facilitate the replacement of 61 windows and 13 doors with new energy efficient units and to minimize the risk to human health and the environment. Minimizing risk shall be accomplished by removing the accessible window and door PCB caulk and encapsulating/enclosing the remaining PCB that remains in the various masonries. The capped masonry shall be included in a campus Caulking Management Plan.

All windows shall have the glass, sashes and any interior partitions not in contact with the caulk removed prior to beginning PCB removal work. All window openings shall have polyethylene sheathing applied on the interior of the window opening to isolate and protect interior surfaces. The work area on the exterior shall be protected with polyethylene sheathing to insure that no caulk debris generated during the window removal migrates. Windows shall be removed from the exterior. Once removed, windows and all associated debris shall be disposed of as a combined Pb and PCB containing waste above 50 PPM

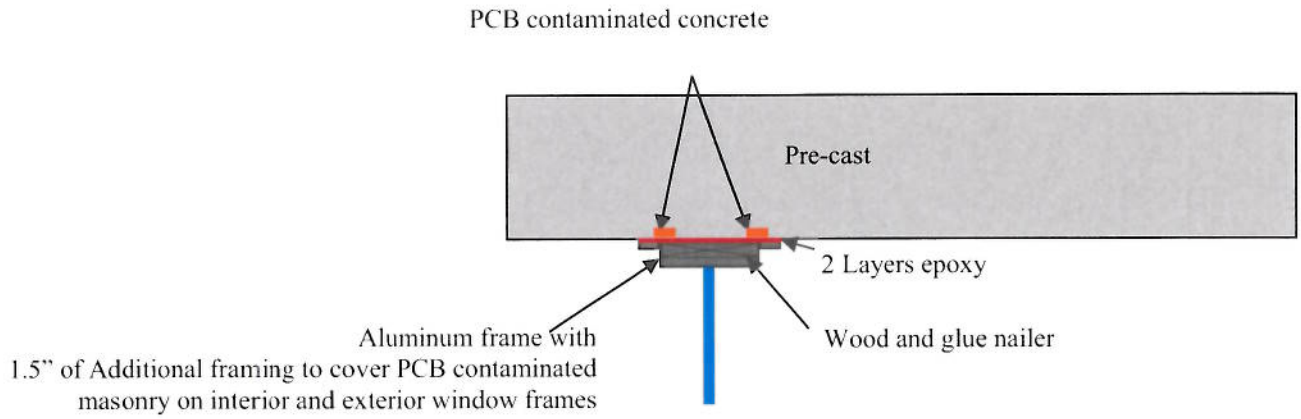
The window openings shall be manually cleaned of all visible interior and exterior caulking. Once no visible caulking remains the openings shall be washed with solvent. Once cleaned, the openings shall be sealed with two layers of a waterproof epoxy to encapsulate any remaining PCBs within the masonry. The base or first coat of epoxy will be red in color with the top coat to match existing. A wood filler that will act as an attachment substrate for the window frame will need to be adhered within the opening. This wood shall have a construction adhesive applied to the surface that shall be in contact with the epoxy encapsulant. The construction adhesive shall serve multiple functions: to retain the wood in place, add additional enclosure, and serve as an additional sealant/enclosure where the Ramset fastener required penetrates the epoxy into the masonry.

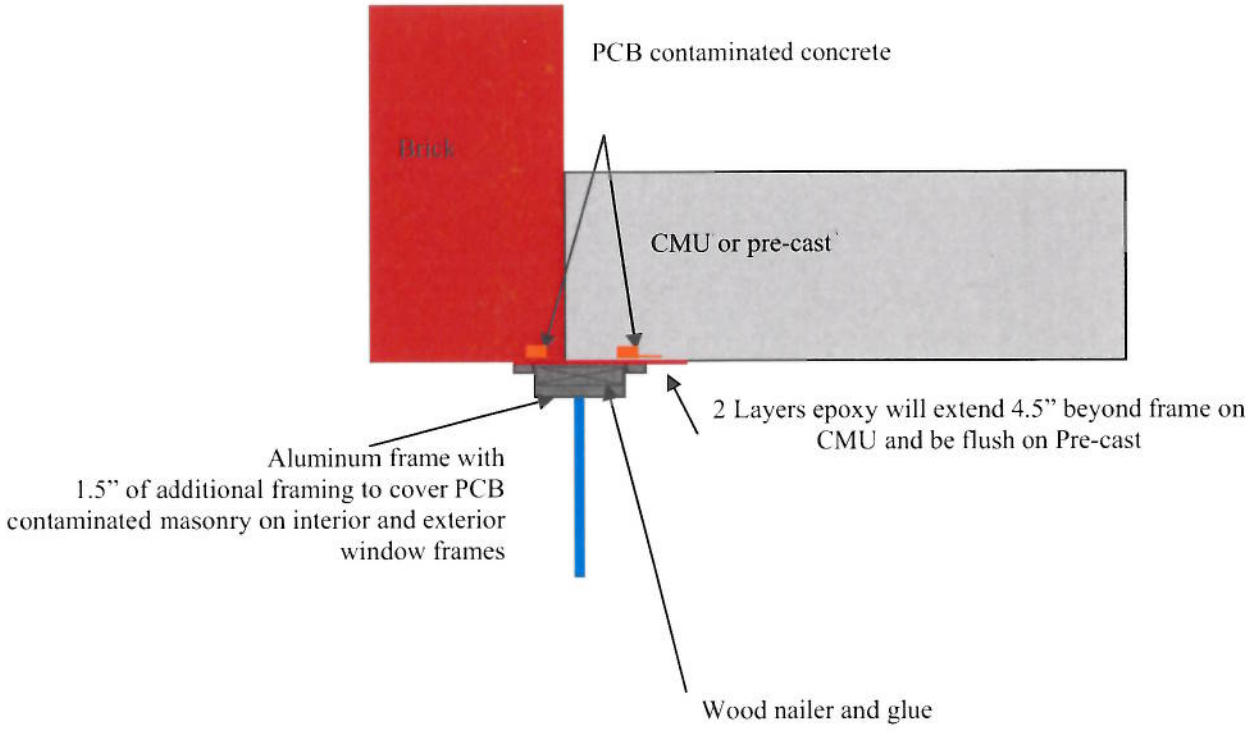
The square second floor windows terminate above a metal fascia. According to the original construction documents, that termination is a wood trim to which the window is attached and caulked. The wood trim with caulk shall be removed and disposed as a PCB waste greater than 50 PPM.

New windows shall completely cover the area where the PCB caulk was located on the exterior and interior of the windows and doors. The width of the windows shall be three inches wider than the existing so that the window frame shall extend 1.5 inches beyond the existing point where both the exterior and interior location of caulk is currently attached. On interior surfaces the window will cover PCB caulk on pre-cast construction. On CMU interior construction the PCBs are still being detected at one inch from the caulk but at much lower levels. Most of the contaminated CMU will be covered by window and epoxy leaving a small portion covered by epoxy only. Epoxy on CMU will extend six inches from the point of current caulk application.

Steel lintels are present on first floor doors and windows. A total of 26 lintels (13 window and 13 door) are present and will be disturbed by this window and door removal project. Lintels will be cleaned of all caulking. Following the cleaning and decontamination the lintels will be wipe sampled to confirm adequate decontamination.

Following Remediation
Top View of the Different Construction Types





Soil
Soil testing determined the bounds of PCB contamination to be a six inch depth at the drip line and no longer present above 1 PPM at two feet from the drip line. Soil will be removed to a depth of six inches two feet from the drip line. All soil will be disposed of with frames and caulk as PCB greater than 50 PPM.

Proposed Confirmatory Testing
We propose confirmatory sampling as follows:

- Four samples of each type of masonry (brick, pre-cast, CMU) for a total of 12 samples of masonry located beneath the caulk to document capped PCB levels.
- Wipe samples of the first five lintels and an additional sample per five lintels cleaned if the initial 5 are below $10\mu g/100cm^2$.
- Ten wipe samples of the second epoxy coating prior to window installation to confirm the efficacy of the epoxy.
- Following the soil removal, a composite sample at the 6" depth and a surface edge sample at the 2' border from each elevation.
- At the conclusion of the project, repeating the air sampling within the building.

Cap
The entire cap will consist of two layers of encapsulating epoxy and an enclosure made of wood and new window that will cover the contaminated masonry. Brick and pre-cast masonry will be covered with 2 coats of epoxy applied and will cover at least 1.5 inches beyond the caulk on the exterior and 1.5 inches beyond interior caulk if on pre-cast. Epoxy will be extended to six inches beyond the caulk on CMU. A wood attachment block will be adhered to the epoxy coating on two sides in contact with the masonry. A Ramset fastener will be used to mechanically fasten the wood attachment block to the masonry sill. The construction adhesive will serve as additional fastening of the wood and to seal the penetration of the Ramset fastener through the epoxy coating. The replacement windows will act as the final enclosure completely covering the masonry sill with window frame and replacement caulking. The owner expects other buildings will require a similar process when PCBs are encountered. As part of that Operation and Maintenance Plan only Red tinted epoxy will be used for this and future projects as an indicator that the epoxy serves as a PCB encapsulant.

Operations and Maintenance Plan
The owner has established a Managment Plan for the safe management of PCBs on campus. At the conclusion of this project the enclosed windows will be included into that plan.

Deed Restriction
Within 60 days of completing the project a notation shall be recorded with the State of NH Registry of Deeds that the land has been used as a PCB Remediation Waste Disposal and that the cap must remain in perpetuity or until the site is cleaned. The owner shall submit a signed certification that the deed restriction has been recorded.

Contingencies
During the removal process if any additional PCB-containing materials such as seals and mechanical fasteners near or in contact with contaminated masonry are found, these will also be disposed of as PCB remediation waste.

Any unanticipated situation that is not consistent with this proposed plan would require notification to EPA of the change and require its approval of any changes in work practices or activities.

Waste Handling and Disposal
All PCB-containing caulk, caulk debris, window frames, disposables and polyethylene shall be handled and disposed of as a remediation waste at a TSCA-approved landfill.

The TSCA-regulated waste will be trucked by:
Clean Harbors
20 Dunklee Road
Bow, NH. 03304

The TSCA-regulated waste will be disposed of at:
Clean Harbors Grassy Mountain, LLC
Grassy Mountain, UT 84029
EPA Id# UTD991301748

If you have any questions, please feel free to contact me.

Sincerely,

Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
Office 603-664-5500
Cell 603-767-3142
e-mail Ray@desmaraisenvironmental.com

List of Appendices
Appendix 1 - Floor plans showing the location and results of samples collected
Appendix 2 - Pertinent photographs
Appendix 3 - Laboratory reports for samples collected
Appendix 4 - Copy of occupant notification posting
Appendix 5 - Owner certification
Appendix 6 - Sample of deed restriction
Appendix 7 – Epoxy MSDS

Appendix 3

Lab Reports

PHOENIX
Environmental Laboratories, Inc.

Monday, December 20, 2010

Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Project ID: STILLINGS DINING HALL UNH
Sample ID#s: AZ87339 - AZ87341

This laboratory is in compliance with the QA/QC procedures outlined in EPA 600/4-79-019, Handbook for Analytical Quality in Water and Waste Water, March 1979, SW846 QA/QC and NELAC requirements of procedures used.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

PHOENIX
Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

December 20, 2010

FOR: Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		12/13/10	13:30
Location Code:	DESMAR	Received by:	LDF	12/15/10	10:35
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GAZ87339
Phoenix ID: AZ87339

Project ID: STILLINGS DINING HALL UNH
Client ID: #1 GREY ORIGINAL CAULK

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	12/15/10			E160.3
Caulk Extraction for PCB	Completed			12/15/10		QQ/K	SW3540C
PCB (Soxhlet)							
PCB-1016	ND	16000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1221	ND	16000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1232	ND	16000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1242	ND	16000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1248	ND	16000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1254	210000000	16000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1260	ND	16000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1262	ND	16000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1268	ND	16000000	ug/Kg	12/17/10		MH	3540C/8082
QA/QC Surrogates							
% DCBP	Diluted Out		%	12/17/10		MH	3540C/8082
% TCMX	Diluted Out		%	12/17/10		MH	3540C/8082

Parameter	Result	RL	Units	Date	Time	By	Reference

Comments:

100 % SOLID ASSUMED

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
December 21, 2010

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Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

December 20, 2010

FOR: Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		12/13/10	13:30
Location Code:	DESMAR	Received by:	LDF	12/15/10	10:35
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GAZ87339
Phoenix ID: AZ87340

Project ID: STILLINGS DINING HALL UNH
Client ID: #2 WHITE CAULK

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	12/15/10			E160.3
Caulk Extraction for PCB	Completed			12/15/10		QQ/K	SW3540C
PCB (Soxhlet)							
PCB-1016	ND	36000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1221	ND	36000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1232	ND	36000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1242	ND	36000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1248	ND	36000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1254	99000000	36000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1260	ND	36000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1262	ND	36000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1268	ND	36000000	ug/Kg	12/17/10		MH	3540C/8082
QA/QC Surrogates							
% DCBP	Diluted Out		%	12/17/10		MH	3540C/8082
% TCMX	Diluted Out		%	12/17/10		MH	3540C/8082

Parameter	Result	RL	Units	Date	Time	By	Reference

Comments:

100 % SOLID ASSUMED

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
December 21, 2010

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Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

December 20, 2010

FOR: Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		12/13/10	13:30
Location Code:	DESMAR	Received by:	LDF	12/15/10	10:35
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GAZ87339
Phoenix ID: AZ87341

Project ID: STILLINGS DINING HALL UNH

Client ID: #3 INTERIOR CAULK

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	12/15/10			E160.3
Caulk Extraction for PCB	Completed			12/15/10		QQ/K	SW3540C
PCB (Soxhlet)							
PCB-1016	ND	19000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1221	ND	19000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1232	ND	19000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1242	ND	19000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1248	ND	19000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1254	160000000	19000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1260	ND	19000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1262	ND	19000000	ug/Kg	12/17/10		MH	3540C/8082
PCB-1268	ND	19000000	ug/Kg	12/17/10		MH	3540C/8082
QA/QC Surrogates							
% DCBP	Diluted Out		%	12/17/10		MH	3540C/8082
% TCMX	Diluted Out		%	12/17/10		MH	3540C/8082

Parameter	Result	RL	Units	Date	Time	By	Reference

Comments:

100 % SOLID ASSUMED

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Phyllis Shiller, Laboratory Director
December 21, 2010

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Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac
NY # 11301

QA/QC Report

December 21, 2010

QA/QC Data

SDG I.D.: GAZ87339

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch 167453, QC Sample No: AZ87046 (AZ87339, AZ87340, AZ87341)							
Polychlorinated Biphenyls							
PCB-1016	ND	108	109	0.9			
PCB-1221	ND						
PCB-1232	ND						
PCB-1242	ND						
PCB-1248	ND						
PCB-1254	ND						
PCB-1260	ND	94	100	6.2			
PCB-1262	ND						
PCB-1268	ND						
% DCBP (Surrogate Rec)	107	98	101	3.0			
% TCMX (Surrogate Rec)	92	84	86	2.4			

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller, Laboratory Director
December 21, 2010

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp: 3.0°C Pg of

Data Delivery:
- [ ] Fax #:
- [x] Email: Ray@desmaraisenvironmental.com, Tim@desmaraisenvironmentl.com

Customer:	Desmarais Environmental, Inc.	Project:	Stillings Dining Hall UNH	Project P.O:	
Address:	320 Hemlock Lane	Report to:		Phone #:	603-664-5500
	Barrington, NH 03825	Invoice to:		Fax #:	603-664-5600

Sampler's Signature: [signature] Date: 12/13/10

Client Sample - Information - Identification

Matrix Code:
DW=drinking water **WW**=wastewater **S**=soil/solid **O**=oil
GW=groundwater **SL**=sludge **A**=air **X**=other

Analysis Request: PCB Solvent

Phoenix Sample #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	PCB	Solvent
57339	#1 Grey Original Caulk	S	12/13/2010	1:30 PM	↓	
57340	#2 White Caulk	S	12/13/2010	1:30 PM	↓	
57341	#3 Interior Caulk	S	12/13/2010	1:30 PM	↓	

Soil VOA Vials [ ] methanol [ ] Sod Bisulfate
GL Soil container ( ) oz
GL Soil container ( ) oz
40 ml VOA Vial [ ] As is [ ] HCl
GL Amber 1000ml [ ] As is [ ] H2SO4
PL As is [ ] 250ml [ ] 500ml [ ] 1000ml
PL H2SO4 [ ] 250ml [ ] 500ml
PL HNO3 250ml
PL NaOH 250ml
Bacteria Bottle

Relinquished by:	Accepted by:	Date:	Time:
	Kyle Bleyda	12-15-10	10:35

Comments, Special Requirements or Regulations:

Turnaround:
- [ ] 1 Day*
- [ ] 2 Days*
- [ ] 3 Days*
- [x] Standard
- [ ] Other

* SURCHARGE APPLIES

CT/RI
- [ ] RCP Cert
- [ ] GW Protect
- [ ] GA Mobility
- [ ] GB Mobility
- [ ] SW Protection
- [ ] Res. Vol.
- [ ] Ind. Vol.
- [ ] Res. Criteria
- [ ] Other

MA
- [ ] MCP Certification
- [ ] GW-1
- [ ] GW-2
- [ ] GW-3
- [ ] S-1
- [ ] S-2
- [ ] S-3
- [ ] MWRA eSMART
- [ ] Other

State where samples were collected: _____

Data Format
- [ ] Excel
- [ ] PDF
- [ ] GIS/Key
- [ ] EQuIS
- [ ] Other _____

Data Package
- [ ] ASP-A
- [ ] NJ Reduced Deliv. *
- [ ] NJ Hazsite EDD
- [ ] Phoenix Std Report
- [ ] Other

PHOENIX
Environmental Laboratories, Inc.

Wednesday, February 09, 2011

Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Project ID: STILLINGS DINING HALL UNH
Sample ID#s: AZ99549 - AZ99562

This laboratory is in compliance with the QA/QC procedures outlined in EPA 600/4-79-019, Handbook for Analytical Quality in Water and Waste Water, March 1979, SW846 QA/QC and NELAC requirements of procedures used.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B
NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 09, 2011

FOR: Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/31/11	10:00
Location Code:	DESMAR	Received by:	SW	02/01/11	13:31
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GAZ99549
Phoenix ID: AZ99549

Project ID: STILLINGS DINING HALL UNH

Client ID: #1 SOIL NORTH ELEVATION

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	85		%	02/01/11		EG	E160.3
Extraction for PCB	Completed			02/01/11		BB/E	SW3540C
PCB (Soxhlet)							
PCB-1016	ND	390	ug/Kg	02/08/11		MH	3540C/8082
PCB-1221	ND	390	ug/Kg	02/08/11		MH	3540C/8082
PCB-1232	ND	390	ug/Kg	02/08/11		MH	3540C/8082
PCB-1242	ND	390	ug/Kg	02/08/11		MH	3540C/8082
PCB-1248	ND	390	ug/Kg	02/08/11		MH	3540C/8082
PCB-1254	4300	390	ug/Kg	02/08/11		MH	3540C/8082
PCB-1260	ND	390	ug/Kg	02/08/11		MH	3540C/8082
PCB-1262	ND	390	ug/Kg	02/08/11		MH	3540C/8082
PCB-1268	ND	390	ug/Kg	02/08/11		MH	3540C/8082
QA/QC Surrogates							
% DCBP	118		%	02/08/11		MH	3540C/8082
% TCMX	100		%	02/08/11		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
February 10, 2011

PHOENIX
Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 09, 2011

FOR: Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/31/11	10:00
Location Code:	DESMAR	Received by:	SW	02/01/11	13:31
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GAZ99549
Phoenix ID: AZ99550

Project ID: STILLINGS DINING HALL UNH
Client ID: #2 SOIL WEST ELEVATION

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	95		%	02/01/11		EG	E160.3
Extraction for PCB	Completed			02/01/11		BB/E	SW3540C
PCB (Soxhlet)							
PCB-1016	ND	340	ug/Kg	02/08/11		MH	3540C/8082
PCB-1221	ND	340	ug/Kg	02/08/11		MH	3540C/8082
PCB-1232	ND	340	ug/Kg	02/08/11		MH	3540C/8082
PCB-1242	ND	340	ug/Kg	02/08/11		MH	3540C/8082
PCB-1248	ND	340	ug/Kg	02/08/11		MH	3540C/8082
PCB-1254	1300	340	ug/Kg	02/08/11		MH	3540C/8082
PCB-1260	ND	340	ug/Kg	02/08/11		MH	3540C/8082
PCB-1262	ND	340	ug/Kg	02/08/11		MH	3540C/8082
PCB-1268	ND	340	ug/Kg	02/08/11		MH	3540C/8082
QA/QC Surrogates							
% DCBP	132		%	02/08/11		MH	3540C/8082
% TCMX	108		%	02/08/11		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
February 10, 2011

PHOENIX
Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 09, 2011

FOR: Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/31/11	10:00
Location Code:	DESMAR	Received by:	SW	02/01/11	13:31
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GAZ99549
Phoenix ID: AZ99551

Project ID: STILLINGS DINING HALL UNH

Client ID: #3 SOIL EAST ELEVATION

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	53		%	02/01/11		EG	E160.3
Extraction for PCB	Completed			02/01/11		BB/E	SW3540C
PCB (Soxhlet)							
PCB-1016	ND	580	ug/Kg	02/08/11		MH	3540C/8082
PCB-1221	ND	580	ug/Kg	02/08/11		MH	3540C/8082
PCB-1232	ND	580	ug/Kg	02/08/11		MH	3540C/8082
PCB-1242	ND	580	ug/Kg	02/08/11		MH	3540C/8082
PCB-1248	ND	580	ug/Kg	02/08/11		MH	3540C/8082
PCB-1254	2500	580	ug/Kg	02/08/11		MH	3540C/8082
PCB-1260	ND	580	ug/Kg	02/08/11		MH	3540C/8082
PCB-1262	ND	580	ug/Kg	02/08/11		MH	3540C/8082
PCB-1268	ND	580	ug/Kg	02/08/11		MH	3540C/8082
QA/QC Surrogates							
% DCBP	112		%	02/08/11		MH	3540C/8082
% TCMX	96		%	02/08/11		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
February 10, 2011

PHOENIX
Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 09, 2011

FOR: Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/31/11	10:00
Location Code:	DESMAR	Received by:	SW	02/01/11	13:31
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GAZ99549
Phoenix ID: AZ99552

Project ID: STILLINGS DINING HALL UNH
Client ID: #4 SOIL SOUTH ELEVATION

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	51		%	02/01/11		EG	E160.3
Extraction for PCB	Completed			02/01/11		BB/E	SW3540C
PCB (Soxhlet)							
PCB-1016	ND	540	ug/Kg	02/08/11		MH	3540C/8082
PCB-1221	ND	540	ug/Kg	02/08/11		MH	3540C/8082
PCB-1232	ND	540	ug/Kg	02/08/11		MH	3540C/8082
PCB-1242	ND	540	ug/Kg	02/08/11		MH	3540C/8082
PCB-1248	ND	540	ug/Kg	02/08/11		MH	3540C/8082
PCB-1254	1500	540	ug/Kg	02/08/11		MH	3540C/8082
PCB-1260	ND	540	ug/Kg	02/08/11		MH	3540C/8082
PCB-1262	ND	540	ug/Kg	02/08/11		MH	3540C/8082
PCB-1268	ND	540	ug/Kg	02/08/11		MH	3540C/8082
QA/QC Surrogates							
% DCBP	114		%	02/08/11		MH	3540C/8082
% TCMX	94		%	02/08/11		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
February 10, 2011

PHOENIX
Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 09, 2011

FOR: Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/31/11	10:00
Location Code:	DESMAR	Received by:	SW	02/01/11	13:31
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GAZ99549
Phoenix ID: AZ99555

Project ID: STILLINGS DINING HALL UNH

Client ID: #7 MASONRY UNDER EXT CAULK 0-5 IN

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	02/01/11			E160.3
Caulk Extraction for PCB	Completed			02/01/11		BB/E	SW3540C
PCB (Soxhlet)							
PCB-1016	ND	590000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1221	ND	590000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1232	ND	590000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1242	ND	590000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1248	ND	590000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1254	8200000	590000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1260	ND	590000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1262	ND	590000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1268	ND	590000	ug/Kg	02/08/11		MH	3540C/8082
QA/QC Surrogates							
% DCBP	Diluted Out		%	02/08/11		MH	3540C/8082
% TCMX	Diluted Out		%	02/08/11		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
February 10, 2011

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Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 09, 2011

FOR: Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/31/11	10:00
Location Code:	DESMAR	Received by:	SW	02/01/11	13:31
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GAZ99549
Phoenix ID: AZ99556

Project ID: STILLINGS DINING HALL UNH

Client ID: #8 MASONRY UNDER EXT CAULK 5-1 IN

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	02/01/11			E160.3
Caulk Extraction for PCB	Completed			02/01/11		BB/E	SW3540C
PCB (Soxhlet)							
PCB-1016	ND	96000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1221	ND	96000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1232	ND	96000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1242	ND	96000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1248	ND	96000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1254	1200000	96000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1260	ND	96000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1262	ND	96000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1268	ND	96000	ug/Kg	02/08/11		MH	3540C/8082
QA/QC Surrogates							
% DCBP	Diluted Out		%	02/08/11		MH	3540C/8082
% TCMX	Diluted Out		%	02/08/11		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
February 10, 2011

PHOENIX
Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 09, 2011

FOR: Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/31/11	10:00
Location Code:	DESMAR	Received by:	SW	02/01/11	13:31
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GAZ99549
Phoenix ID: AZ99557

Project ID: STILLINGS DINING HALL UNH

Client ID: #9 CMU INT CAULK 0-5 IN

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	02/01/11			E160.3
Caulk Extraction for PCB	Completed			02/01/11		BB/E	SW3540C
PCB (Soxhlet)							
PCB-1016	ND	510000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1221	ND	510000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1232	ND	510000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1242	ND	510000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1248	ND	510000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1254	3500000	510000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1260	ND	510000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1262	ND	510000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1268	ND	510000	ug/Kg	02/08/11		MH	3540C/8082
QA/QC Surrogates							
% DCBP	Diluted Out		%	02/08/11		MH	3540C/8082
% TCMX	Diluted Out		%	02/08/11		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
February 10, 2011

PHOENIX

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587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 09, 2011

FOR: Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/31/11	10:00
Location Code:	DESMAR	Received by:	SW	02/01/11	13:31
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GAZ99549
Phoenix ID: AZ99558

Project ID: STILLINGS DINING HALL UNH

Client ID: #10 CMU INT CAULK 5-1 IN

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	02/01/11			E160.3
Caulk Extraction for PCB	Completed			02/01/11		BB/E	SW3540C
PCB (Soxhlet)							
PCB-1016	ND	73000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1221	ND	73000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1232	ND	73000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1242	ND	73000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1248	ND	73000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1254	210000	73000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1260	ND	73000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1262	ND	73000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1268	ND	73000	ug/Kg	02/08/11		MH	3540C/8082
QA/QC Surrogates							
% DCBP	Diluted Out		%	02/08/11		MH	3540C/8082
% TCMX	Diluted Out		%	02/08/11		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller

Phyllis Shiller, Laboratory Director
February 10, 2011

PHOENIX

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587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 09, 2011

FOR: Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/31/11	10:00
Location Code:	DESMAR	Received by:	SW	02/01/11	13:31
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GAZ99549
Phoenix ID: AZ99559

Project ID: STILLINGS DINING HALL UNH

Client ID: #11 1 IN FROM EXT CAULK PRECAST

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	02/01/11			E160.3
Caulk Extraction for PCB	Completed			02/01/11		BB/E	SW3540C
PCB (Soxhlet)							
PCB-1016	ND	880	ug/Kg	02/09/11		MH	3540C/8082
PCB-1221	ND	880	ug/Kg	02/09/11		MH	3540C/8082
PCB-1232	ND	880	ug/Kg	02/09/11		MH	3540C/8082
PCB-1242	ND	880	ug/Kg	02/09/11		MH	3540C/8082
PCB-1248	ND	880	ug/Kg	02/09/11		MH	3540C/8082
PCB-1254	ND	880	ug/Kg	02/09/11		MH	3540C/8082
PCB-1260	ND	880	ug/Kg	02/09/11		MH	3540C/8082
PCB-1262	ND	880	ug/Kg	02/09/11		MH	3540C/8082
PCB-1268	ND	880	ug/Kg	02/09/11		MH	3540C/8082
QA/QC Surrogates							
% DCBP	112		%	02/09/11		MH	3540C/8082
% TCMX	76		%	02/09/11		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
February 10, 2011

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ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 09, 2011

FOR: Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/31/11	10:00
Location Code:	DESMAR	Received by:	SW	02/01/11	13:31
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GAZ99549
Phoenix ID: AZ99560

Project ID: STILLINGS DINING HALL UNH

Client ID: #12 1 IN FROM EXT CAULK BRICK/MORTAR

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	02/01/11			E160.3
Caulk Extraction for PCB	Completed			02/01/11		BB/E	SW3540C
PCB (Soxhlet)							
PCB-1016	ND	260000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1221	ND	260000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1232	ND	260000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1242	ND	260000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1248	ND	260000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1254	3200000	260000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1260	ND	260000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1262	ND	260000	ug/Kg	02/08/11		MH	3540C/8082
PCB-1268	ND	260000	ug/Kg	02/08/11		MH	3540C/8082
QA/QC Surrogates							
% DCBP	Diluted Out		%	02/08/11		MH	3540C/8082
% TCMX	Diluted Out		%	02/08/11		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
February 10, 2011

PHOENIX
Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 09, 2011

FOR: Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/31/11	10:00
Location Code:	DESMAR	Received by:	SW	02/01/11	13:31
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GAZ99549
Phoenix ID: AZ99561

Project ID: STILLINGS DINING HALL UNH
Client ID: #13 1 IN FROM INT CAULK

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	02/01/11			E160.3
Caulk Extraction for PCB	Completed			02/01/11		BB/E	SW3540C
PCB (Soxhlet)							
PCB-1016	ND	7500	ug/Kg	02/08/11		MH	3540C/8082
PCB-1221	ND	7500	ug/Kg	02/08/11		MH	3540C/8082
PCB-1232	ND	7500	ug/Kg	02/08/11		MH	3540C/8082
PCB-1242	ND	7500	ug/Kg	02/08/11		MH	3540C/8082
PCB-1248	ND	7500	ug/Kg	02/08/11		MH	3540C/8082
PCB-1254	76000	7500	ug/Kg	02/08/11		MH	3540C/8082
PCB-1260	ND	7500	ug/Kg	02/08/11		MH	3540C/8082
PCB-1262	ND	7500	ug/Kg	02/08/11		MH	3540C/8082
PCB-1268	ND	7500	ug/Kg	02/08/11		MH	3540C/8082
QA/QC Surrogates							
% DCBP	Diluted Out		%	02/08/11		MH	3540C/8082
% TCMX	Diluted Out		%	02/08/11		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
February 10, 2011

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 09, 2011

FOR: Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Sample Information		Custody Information		Date	Time
Matrix:	SOLID	Collected by:		01/31/11	10:00
Location Code:	DESMAR	Received by:	SW	02/01/11	13:31
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GAZ99549
Phoenix ID: AZ99562

Project ID: STILLINGS DINING HALL UNH

Client ID: #14 1 IN FROM INT CAULK

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	02/01/11			E160.3
Caulk Extraction for PCB	Completed			02/01/11		BB/E	SW3540C
PCB (Soxhlet)							
PCB-1016	ND	7800	ug/Kg	02/08/11		MH	3540C/8082
PCB-1221	ND	7800	ug/Kg	02/08/11		MH	3540C/8082
PCB-1232	ND	7800	ug/Kg	02/08/11		MH	3540C/8082
PCB-1242	ND	7800	ug/Kg	02/08/11		MH	3540C/8082
PCB-1248	ND	7800	ug/Kg	02/08/11		MH	3540C/8082
PCB-1254	92000	7800	ug/Kg	02/08/11		MH	3540C/8082
PCB-1260	ND	7800	ug/Kg	02/08/11		MH	3540C/8082
PCB-1262	ND	7800	ug/Kg	02/08/11		MH	3540C/8082
PCB-1268	ND	7800	ug/Kg	02/08/11		MH	3540C/8082
QA/QC Surrogates							
% DCBP	Diluted Out		%	02/08/11		MH	3540C/8082
% TCMX	Diluted Out		%	02/08/11		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller, Laboratory Director
February 10, 2011

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

February 10, 2011

QA/QC Data

SDG I.D.: GAZ99549

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch 168733, QC Sample No: AZ93884 (AZ99553, AZ99554)							
Polychlorinated Biphenyl							
PCB-1016	ND	106	107	0.9			
PCB-1221	ND						
PCB-1232	ND						
PCB-1242	ND						
PCB-1248	ND						
PCB-1254	ND						
PCB-1260	ND	116	107	8.1			
PCB-1262	ND						
PCB-1268	ND						
% DCBP (Surrogate Rec)	91	92	97	5.3			
% TCMX (Surrogate Rec)	73	75	75	0.0			
Comment:							
A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.							
QA/QC Batch 170075, QC Sample No: AZ98519 (AZ99549, AZ99550, AZ99551, AZ99552, AZ99555, AZ99556)							
Polychlorinated Biphenyls							
PCB-1016	ND	102	109	6.6	100	104	3.9
PCB-1221	ND						
PCB-1232	ND						
PCB-1242	ND						
PCB-1248	ND						
PCB-1254	ND						
PCB-1260	ND	114	123	7.6	130	129	0.8
PCB-1262	ND						
PCB-1268	ND						
% DCBP (Surrogate Rec)	123	101	106	4.8	128	128	0.0
% TCMX (Surrogate Rec)	89	73	83	12.8	89	90	1.1
QA/QC Batch 170141, QC Sample No: AZ99591 (AZ99557, AZ99558, AZ99559, AZ99560, AZ99561, AZ99562)							
Polychlorinated Biphenyls							
PCB-1016	ND	112	101	10.3			
PCB-1221	ND						
PCB-1232	ND						
PCB-1242	ND						
PCB-1248	ND						
PCB-1254	ND						
PCB-1260	ND	120	106	12.4			
PCB-1262	ND						
PCB-1268	ND						
% DCBP (Surrogate Rec)	114	102	97	5.0			
% TCMX (Surrogate Rec)	93	83	72	14.2			

QA/QC Data

SDG I.D.: GAZ99549

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD

Comment:

* The batch MS and MSD recoveries could not be calculated due to the presence of PCB in the unspiked sample. LCS/LCSD recoveries were within QA/QC limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria

Phyllis Shiller, Laboratory Director
February 10, 2011

PHOENIX Environmental Laboratories, Inc.

CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Temp 5 c.with Pg 1 of 2

Data Delivery:
☐ Fax #: ______
☒ Email: Ray@desmaraisenvironmental.co

Customer: Desmarais Environmental, Inc.
Address: 320 Hemlock Lane
Barrington, NH 03825

Project: Stillings Dining Hall
Report to: ______
Invoice to: ______

Project P.O: ______
Phone #: 603-664-5500
Fax #: 603-664-5600

Client Sample - Information - Identification

Sampler's Signature ______ Date: ______

Matrix Code:
DW=drinking water WW=wastewater S=soil/solid m+ MASONRY
GW=groundwater SL=sludge A=air w=WIPE @ 100CM2

Analysis Request

Phoenix Sample #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	PCB Soxhlet 3540c	+	+	+	+	+	+	+	+	+	+	+	Soil VOA Vials [ ] methanol [ ] Sod Bisulfate	GL Soil container ( )oz	GL Soil container ( )oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ] 250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ] 250ml [ ] 500ml	PL HNO3 250ml	PL NaOH 250ml	Bacteria Bottle
99549	#1 Soil North Elevation	S	1/31/2011	10:00 AM	x											1										
99550	#2 Soil West Elevation	S	1/31/2011	10:00 AM	x											1										
99551	#3 Soil East Elevation	S	1/31/2011	10:00 AM	x											1										
99552	#4 Soil South Elevation	S	1/31/2011	10:00 AM	x											1										
99553	#5 Wipe North Stairwell Floor	W	1/31/2011	10:00 AM	x													1								
99554	#6 Wipe G33 Sill	W	1/31/2011	10:00 AM	x													1								
99555	#7 Masonry Under Ext Caulk 0-,5"	M	1/31/2011	10:00 AM	x											1										
99556	#8 Masonry under Ext caulk .5-1"	M	1/31/2011	10:00 AM	x											1										
99557	#9 CMU Int Caulk 0-.5"	M	1/31/2011	10:00 AM	x											1										
99558	#10 CMU Int Caulk .5-1"	M	1/31/2011	10:00 AM	x											1										
99559	#11 1" from Ext Caulk Precast	M	1/31/2011	10:00 AM	x											1										
99560	#12 1" from Ext Caulk Brick/mortar	M	1/31/2011	10:00 AM	x											1										

Relinquish	Accepted by:	Date:	Time:
Ray Desmarais			
FedEx	[signature]	2/1/11	3:31

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☐ Standard
☐ Other

* SURCHARGE APPLIES

CT/RI
☐ RCP Cert
☐ GW Protect
☐ GA Mobility
☐ GB Mobility
☐ SW Protection
☐ Res. Vol.
☐ Ind. Vol.
☐ Res. Criteria
☐ Other

MA
☐ MCP Certification
☐ GW-1
☐ GW-2
☐ GW-3
☐ S-1
☐ S-2
☐ S-3
☐ MWRA eSMART
☐ Other

Data Format
☐ Excel
☐ PDF
☐ GIS/Key
☐ EQuIS
☐ Other ______

Data Package
☐ ASP-A
☐ NJ Reduced Deliv. *
☐ NJ Hazsite EDD
☐ Phoenix Std Report
☐ Other

State where samples were collected: ______

PHOENIX
Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

March 24, 2011

FOR: Attn: Mr.Ray Desmarais, CIH, CSP
Desmarais Environmental, Inc.
320 Hemlock Lane
Barrington, NH 03825

Sample Information		Custody Information		Date	Time
Matrix:	BULK	Collected by:		03/18/11	13:00
Location Code:	DESMAR	Received by:	BA	03/21/11	10:18
Rush Request:		Analyzed by:	see "By" below		
P.O.#:					

Laboratory Data

SDG ID: GBA12285
Phoenix ID: BA12286

Project ID: STILLINGS DINING HALL UNH

Client ID: SOUTH 2` SURFACE

Parameter	Result	RL	Units	Date	Time	By	Reference
Percent Solid	100	1	%	03/21/11		BA	E160.3
Extraction for PCB	Completed			03/21/11		CC/K	SW3540C
PCB (Soxhlet)							
PCB-1016	ND	320	ug/Kg	03/22/11		MH	3540C/8082
PCB-1221	ND	320	ug/Kg	03/22/11		MH	3540C/8082
PCB-1232	ND	320	ug/Kg	03/22/11		MH	3540C/8082
PCB-1242	ND	320	ug/Kg	03/22/11		MH	3540C/8082
PCB-1248	ND	320	ug/Kg	03/22/11		MH	3540C/8082
PCB-1254	ND	320	ug/Kg	03/22/11		MH	3540C/8082
PCB-1260	ND	320	ug/Kg	03/22/11		MH	3540C/8082
PCB-1262	ND	320	ug/Kg	03/22/11		MH	3540C/8082
PCB-1268	ND	320	ug/Kg	03/22/11		MH	3540C/8082
QA/QC Surrogates							
% DCBP	72		%	03/22/11		MH	3540C/8082
% TCMX	96		%	03/22/11		MH	3540C/8082

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

Phyllis Shiller

Phyllis Shiller, Laboratory Director
March 25, 2011